

REMARKS

Claims 1 and 2 are pending in this application. By this Amendment, claims 1 and 2 are amended to recite features supported in the specification, for example, at page 38, line 21 – page 39, line 19 and Fig. 1. No new matter is added by any of these amendments.

Reconsideration based on the following remarks is respectfully requested.

The Office Action rejects claims 1 and 2 under 35 U.S.C. §102(e) over U.S. Patent 6,112,151 to Kruse, The Office Action further rejects claim 1 under 35 U.S.C. §103(a) over U.S. Patent 5,485,161 to Vaughn. These rejections are respectfully traversed.

Kruse does not teach or suggest an engine-drive-regulation supporting apparatus mounted on a hybrid-drive vehicle which can be driven by an engine and an electric generator/motor, the apparatus comprising engine-drive-regulated region detecting means including at least one of means for judging whether the position of the hybrid-drive vehicle is in a prescribed engine-drive-regulated region on the basis of information received from a vehicle position detecting device provided on the hybrid-drive vehicle or from an external with respect to the hybrid-drive vehicle, and means for receiving an engine-drive-regulation signal from an external with respect to the hybrid-drive vehicle, and engine-drive regulating means for giving a notice to a vehicle driver, suspending the engine, or decelerating the engine to reduce exhaust gas emitted from the hybrid-drive vehicle when it is judged that the position of the hybrid-drive vehicle is in the prescribed engine-drive-regulated region or in response to reception of the engine-drive-regulation signal, as recited in claim 1. These reasons apply by extension to claim 2 based on its dependence from claim 1.

Instead, Kruse discloses an emission control network¹⁰. In particular, Kruse teaches a management center 12 sending an emission control signal to a communications satellite 14 for relay to a vehicle 16 equipped with a terminal 18. An emission control module 52 receives a control command 48 from the terminal 18 to issue a new timing command for

injector drivers 64 relative to the top dead center position of a piston 72 as determined by a crank position sensor 76 (col. 3, lines 49-59, col. 4, lines 32-56 and Figs. 1,3 and 4 of Kruse). There is no teaching or suggestion in Kruse for suspending or decelerating the engine of a hybrid-drive vehicle to reduce exhaust gas emitted, as provided in Applicant's claimed features. In particular, a hybrid-drive vehicle permits such engine suspension or deceleration without impeding the drivability of the vehicle by engaging an alternate locomotion source, which Kruse does not address.

A claim must be literally disclosed for a proper rejection under §102. This requirement is satisfied "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference" (MPEP §2131). Applicants assert Applicant asserts that the Final Office Action fails to satisfy this requirement with Kruse.

Vaughn also fails to teach or suggest an engine-drive-regulation supporting apparatus mounted on a hybrid-drive vehicle which can be driven by an engine and an electric generator/motor, the apparatus comprising engine-drive-regulated region detecting means including at least one of means for judging whether the position of the hybrid-drive vehicle is in a prescribed engine-drive-regulated region on the basis of information received from a vehicle position detecting device provided on the hybrid-drive vehicle or from an external source with respect to the hybrid-drive vehicle, and means for receiving an engine-drive-regulation signal from an external source with respect to the hybrid-drive vehicle, and engine-drive regulating means for giving a notice to a vehicle driver, suspending the engine, or decelerating the engine to reduce exhaust gas emitted from the hybrid-drive vehicle when it is judged that the position of the hybrid-drive vehicle is in the prescribed engine-drive-regulated region or in response to reception of the engine-drive-regulation signal, as recited in claim 1.

Instead, Vaughn discloses a control apparatus for matching vehicle speed with posted limits using GPS. In particular, Vaughn teaches a control system 10 including an engine

computer 15 and a GPS computer 47 that receives satellite navigation signals through an antenna 36 and an amplifying receiver 38. The GPS computer compares latitude and longitude with local posted limits (col. 4, lines 23-32, col. 7, lines 23-29, col. 8, lines 46-51 and Fig. 1 of Vaughn). There is no teaching or suggestion in Vaughn for suspending or decelerating the engine of a hybrid-drive vehicle to reduce exhaust gas emitted, as provided in Applicant's claimed features. In particular, a hybrid-drive vehicle permits such engine suspension or deceleration without impeding the drivability of the vehicle by engaging an alternate locomotion source, which Vaughn fails to consider.

Further, there is no motivation to modify features related to the GPS speed control of Vaughn to achieve Applicant's claimed features, nor has the Office Action established sufficient motivation for a *prima facie* case of obviousness. Even assuming that motivation to modify the applied reference could be established, the combination fails to teach or suggest Applicant's claimed features.


A *prima facie* case of obviousness for a §103 rejection requires satisfaction of three basic criteria: there must be some suggestion or motivation either in the references or knowledge generally available to modify the references or combine reference teachings, a reasonable expectation of success, and the references must teach or suggest all the claim limitations (MPEP §706.02(j)). Applicant asserts that the Office Action fails to satisfy these requirements with Vaughn.

For at least these reasons, Applicant respectfully asserts that the independent claim is now patentable over the applied references. The dependent claim is likewise patentable over the applied reference for at least the reasons discussed, as well as for the additional features it recites. Consequently, both claims are in condition for allowance. Thus, Applicant respectfully requests that the rejections under 35 U.S.C. §§102 and 103 be withdrawn.

In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



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